VIII.—Notices of recent Ornithological Publications.

Ghidini on rare Alpine Birds.

[Aquile ed Avvoltoi nelle Alpi. Angelo Ghidini. Riv. Ital. Ornitol. iii. 1914, pp. 81-83, Tav. ii.]

A short note records the nesting of Aquila fulva (=A. chrysaëtus) in the Leventina valley, the occurrence of Gypaëtus barbatus in the Val d'Aosta and of Querquedula formosa in Canton Ticino, all localities on the Italian side of the Alps, and all species but rarely met with in northern Italy.

Goeldi on the Birds of Switzerland.

[Die Tierwelt der Schweiz in der Gegenwart und in der Vergangenheit. Von Dr. Emil August Göldi, Professor der Zoologie in der Universität Bern. Band i. Wirbeltiere, mit 2 Karten und 5 farbigen Tafeln. Pp. xvi+654. Bern (Francke), 1914. 8vo.]

Dr. Goeldi, as many of our Members will doubtless recall, spent the greater part of his life at Para in Brazil, where he built up a great Zoological Museum which was subsequently named after him. He has now returned to Europe to spend the rest of his life in his native city of Berne, where he has been appointed Professor of Zoology at the High School.

The present volume contains an account of the Vertebrate fauna of Switzerland from a bionomial and geographical standpoint, and is addressed to students of the high schools and universities of Switzerland. In the third chapter, pp. 261-406, will be found an account of the avifauna, based chiefly on the works of Fatio. The number of species recognized is 358, and these are discussed at length from the point of view of their status and geographical relations. A useful table is given showing the names used in the various editions of Fatio's works as compared with those in the British Museum Catalogue; then follows a general review, in which the species are individually treated of at some length, and coupled with their most nearly related forms in other parts of the world. To anyone travelling or sojourning in Switzerland, we can thoroughly recommend this work as a reliable guide, not only to the birds but to the other groups of Vertebrates inhabiting central Europe.

Grinnell on a new Red-winged Blackbird.

[A new Red-winged Blackbird from the Great Basin. By Joseph Grinnell. Proc. Biol. Soc. Wash. xxvii. 1914, pp. 107-108.]

Mr. Grinnell adds one more form to the large number of already named subspecies of *Agelaius phæniceus*. He calls it *A. p. nevadensis*, and states that it inhabits the State of Nevada and parts of north-castern California which lie between the Rocky Mountains and the Sierra Nevada, where the climate is dry and desert-like.

Mathews on Australian Birds.

[The Birds of Australia. By Gregory M. Mathews. Vol. iii. pt. 6, pp. 445-512, pls. 190-199 (June 1914); vol. iv. pt. 1, pp. 1-80, pls. 200-209 (October 1914).]

In these parts, concluding the Ardeiformes and proceeding to the Anseriformes, Mr. Mathews continues his careful researches into the synonymy of the various forms, and, as usual, gives an admirable summary of their life-histories, for the elucidation of which he has been successful in enlisting a still greater of correspondents. The illustrations leave little to be desired.

Only two new genera are proposed, and no new species or subspecies, but our readers should consult in this connexion the 'Austral Avian Record ' and the author's last 'List of Australian Birds,' besides 'Novitates Zoologicæ.' The new genera are *Ctenanas* for *Leptotarsis* Eyton, preoecupied under the form *Leptotarsus* Guerin, and *Hemigarzetta* for *Herodias eulophotes* Swinhoe; but the former had been more doubtfully suggested in the Austral Avian Record (vol. ii. p. 90). Mr. Mathews also accepts *Radjah* Rehb. for the White-headed Sheld-Duck, and *Casarca* Bp. for the Mountain Duck, giving in both cases the differences which he thinks entitles them to be separated from *Tadorna*. Similarly he has now Dupetor and Ixobrychus for Ardeiralla and Ardetta respectively.

He withdraws the proposed genus *Toburides* for the fine red Mangrove-Bittern, and the following subspecific names: *tormenti* for the N.W.A. Blue Beef Heron, *roberti* for W.A. Black Swan, *hamiltoni* for the N.W.A. Pied Goose, *georgi* for the W.A. Cape Barren Goose, *westralis* for the W.A. Sheld-Duck, both *peroni* and *gouldi* in favour of (*javanica*) australis for the "Whistling Duck."

He separates the blue and white forms of Ardea sucra, as some other writers have done, but drops the name sucra Gm., which he believes to have been based on a hybrid; his specific names stand as matook (Vicill.) and greyi. He considers Ardea aruensis Gray = A. picata Gould = A. flavirostris Sharpe, and calls the Australian bird aruensis flavirostris; he identifies A. maculata Lath. with the Australian Night Heron.

In the beginning of vol. iv. the disquisition on the Anseriformes will be found most useful by students of the group; and it should be noted that the author inclines to consider the peculiar Australian genera of Antarctic origin; further on, a very full account is given of our earliest records of the Black Swan.

North on the Birds of New South Wales.

[Zoology of New South Wales. The Birds. By Alfred J. North, C.M.B.O.U., C.M.Z.S. Extr. New South Wales Handbook, British Association for the Advancement of Science, 1914, pp. 294-313.]

This short review of the avifauna of New South Wales was prepared for the British visitors attending the Meeting of the British Association which took place in Australia last year, by Mr. North, of the Australian Museum in Sydney. Though containing no novel facts, it was no doubt most valuable to the Members of the Association who took part in the Meeting. It is illustrated by a plate containing small but clear representations of some of the more typical Australian forms of bird-life.

Roberts on South African Birds.

[Notes on Birds in the Collection of the Transvaal Museum, with descriptions of several new sub-species. By Austin Roberts. Annals of the Transvaal Museum, iv. 1914, pp. 169-179.]

This short paper contains a number of emendations and corrections with regard to species and subspecies of birds occurring in south Africa, and should be carefully studied by all those interested in the avifauna of that region. A number of new forms are described belonging to the genera Lophoceros, Rhinopomustus, Anthus, Anthoscopus, Tarsiger, Centropus, and Chlorophoneus.

Schioler on the Races of the Eider-Duck.

[Lidt om Ederfuglen, Somateria mollissima, L. og nogle af dens Racer. Af E. Lehn Schiøler. Dansk ornith. For. Tids. viii. 1914, pp. 233-276, 13 text-figs.]

This is a supplement or a continuation of a paper published by the author in the same journal in 1908, and contains his more recent views on the distinguishable races of the Eider-Duck. Mr. Schiøler has been able to assemble together a very large mass of material, and has thoroughly worked it out. He has measured and reduced to an average the dimensions of a large number of birds of different ages and sexes belonging to the Norwegian, Facroese, and Icelandic races of the Eider, and has compared them with the typical race from Sweden and Denmark.

From his observations and measurements it appears that he is prepared to recognise the Icelandic, Faeroese, and Norwegian (west and north-west) Eiders as sufficiently distinct from the typical Swedish and Danish birds to be regarded as subspecies, and for these he adopts the names first proposed by Brehm, viz., Somateria mollissima islandica, S. m. faeroeensis, and S. m. norvegica. The differences between these three forms are fully detailed and illustrated in the memoir, which should be consulted by all who are interested in the subject.

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Seligmann and Shattock on Spermatogenesis in the Mallard.

[Observations made to ascertain whether any relation subsists between the seasonal assumption of the "eclipse" plumage in the Mallard (*Anas boscas*) and the functions of the testicle. By C. G. Seligmann, F.Z.S., and S. G. Shattock. Proc. Zool. Soc. 1914, pp. 23–43, text-figs. 1-6.]

The object of the observations and experiments described in this paper were to endeavour to ascertain what relations existed between the periods of sexual activity of the testicles of the Mallard and of the plumage-changes, and whether these two phenomena had any causal relation to each other.

Two series of observations were undertaken. Of these the first consisted in the simultaneous examination of the plumage and the condition of the testes in a series of Wild Ducks during any month in the year; the other of observations on Wild Ducks which had been castrated.

The conclusions arrived at are that the periods of activity and non-activity of the testes do not coincide with the two seasonal changes of plumage. The testes normally attain their maximum size in March or April, while the cclipse plumage is assumed in July and passes off in September. If, however, castration is carried out during the months when the testes are assuming or have assumed their functional activity, the assumption of the eclipse plumage is delayed, and in some cases is not assumed at all. Great difficulty, however, was found in completely performing the operation of castration, and in almost all birds examined, which had been previously so treated, small nodules or grafts of regenerated testicular tissue were found.

Shufeldt on the Eggs of Humming-birds.

[Reder og Aeg af Nordamerikanske Kolibrier (Trochili). Af R. W. Shufeldt. Med Tavle ii.-viii. Dansk ornith. For. Tids. viii. 1914, pp. 187-195.]

The veteran American ornithologist Dr. Shufeldt has written a general account of the nests and eggs of the Humming-birds of North America for the Danish Ornithological Journal. The photographs which illustrate the paper are apparently taken by the author himself from a collection of nests with the eggs in situ. They represent examples of the eight species found within the borders of the United States and chiefly in California.

Swarth on Arizona Birds.

[A distributional list of the Birds of Arizona. By Harry S. Swarth. Cooper Ornithological Club. Pacific Coast Avifauna, number 10. Pp. 1-133. Hollywood, Cal., 1914. 8vo.]

For some years past the author of this work has been engaged in field-work among the birds of the State of Arizona, which we may remind our readers lies just to the east of California and to the north of the Mexican boundaryline, in the south-western part of the United States. Throughout the greater part of Arizona, which is nearly equal in area to the whole of the British Isles, desert conditions prevail, and the rainfall is probably less than in any State in the Union.

Notwithstanding this the author has been enabled to compile a list of 362 species and subspecies occurring within the State. With each of these is given a brief outline of the status or method of occurrence, as well as of the distribution within the State. An analysis of the avifauna and a discussion of the life-zones, illustrated by a map, follows the list, and the whole is completed by a careful bibliography, the titles of which are arranged chronologically; the first one of these, by William Gambel, only dates from 1843, showing how comparatively recent the exploration of this State has been. The work appears to have been very accurately done, and will be of great service to all workers in North American ornithology.

Williams on the Birds of Sarawak.

[Some notes on Birds in Sarawak. By R. B. Williams. Sarawak Museum Journal, ii. 1914, pp. 79-98.]

This short paper contains some valuable field-notes on Bornean birds which had been added to a series of accurate paintings of the birds themselves made by Mr. Williams during a three years' residence in Sarawak. They seemed

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to the Curator of the Sarawak Museum, Mr. J. C. Moulton, well worthy of publication, and they will no doubt be found useful by students of Malayan ornithology.

The Auk.

[The Auk. A quarterly Journal of Ornithology. Vel. xxxi. nos. 1-4. 1914.]

This volume of the 'Auk' opens appropriately with a most eloquent appreciation of our late Editor, Dr. P. L. Selater, from the pen of one of his oldest surviving friends and contemporaries, Dr. Daniel Giraud Elliot, who is now living in New York and working at the American Museum of Natural History. He describes how he first called on Dr. Selater and made his acquaintance in 1859, shortly after he had been elected Secretary of the Zoological Society, and how he saw him constantly from then onwards, whenever he had occasion to come to England. The memoir is steeped throughout with veneration and reverence for the great men of the zoological world of the Victorian era, and it is far the most touching tribute to the memory of Dr. Selater which has yet been published.

Mr. R. C. Murphy, who made a voyage in a New Bedford whaling-brig to South Georgia in 1912–13, brought back some 500 skins of sea-birds from that remote island to enrich the collections of the American Museum in New York and of the Brooklyn Museum as well. It will be remembered that he sent an interesting photograph of a flock of various species of Petrels and Albatrosses to the 'Ibis' of last April. He now (p. 429) contributes to the pages of the 'Auk' a general account of his adventures and observations, illustrated with many photographs of sea-birds *. He also proposes (p. 13) to add another species of Petrel (*Æstrelata chionophara*, sp. n.) to the three already described from Trinidad Islet in the south tropical Atlantic : this seems, perhaps, a rather questionable proceeding, as only one example of the new species was obtained, and there ean be

* A somewhat popular account, more fully illustrated, will be found in the Brooklyn Museum Quarterly, i. 1914, pp. 83-110. no doubt that the plumages of the various members of this genus are far from being properly understood as yet.

In a third paper (p. 526) he reviews, in collaboration with Mr. J. T. Nichols, the forms of the genus *Phabetria*, of which until comparatively recently but one species was recognized. In this note the authors propose a new name for the Sooty Albatross of the west coast of America, which sometimes wanders as far north as the coast of Oregon. It was originally named *Diomedea fusca* by Audubon, but as this specific name is preoccupied they propose to designate it *Phabetria palpebrata auduboni*, bringing the number of named forms of the genus up to six.

An interesting point is made by Mr. J. D. Figgins (p. 62), who shows that Gambel's Quail, which has been introduced into the western part of the State of Colorado, and has there increased and multiplied and become a common bird, has, as compared with the typical birds from California, whence we may presume it was originally brought, undergone marked changes in coloration as well as in size. Are we justified, then, in giving this artificially and recently introduced race a new name? Such action was certainly taken in the case of the Bermuda Goldfinch (*cf.* Kennedy, Bull. B.O.C. xxxiii. 1913, p. 33).

All ornithologists interested in moult and plumage change should read an excellent account (p. 293), given by Dr. J. Dwight, of this phenomenon in the Scoter Ducks. It is illustrated by a coloured plate of the heads of the three American and three Old-World species, carefully prepared from fresh specimens and showing the coloration of the curious knobs and protuberances so characteristic of the birds of the genus *Œdemia*. These, as well as the adult coloration of the legs and feet, begin to appear during the first winter.

Two interesting facts are brought forward by Dr. Dwight and are believed to be entirely new discoveries. In both CE. americana and the corresponding CE. nigra of Europe, the outer primary is very strongly emarginated on the inner web. The same feather in the young bird is normal and not

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emarginate, and a young *Œ*. nigra or *Œ*. fusca, in whatever plumage it may be, can always be detected by this means. In the other species, curiously enough, this distinction does not hold good. Dr. Dwight also asserts that in addition to the usual post-nuptial moult in August, when all the feathers including the remiges are changed, there is partial prenuptial moult in March or April, when the body- and tailfeathers are changed but not the remiges. This is stated to be true for all the species so far as Dr. Dwight has been able to discover, and has been entirely overlooked up to now.

Mr. A. II. Wright, who has written much on the former history of the Passenger Pigeon, has now turned his attention to the Turkey and discusses in a long article, pp. 334 and 463, the early history of this bird and its introduction and domestication in Europe. It is said to have been served at the marriage feast of Charles IX. of France in 1570, and this one of the earliest notices of its being mentioned in Europe.

It has long been known that the stomach of the Tanagrine genus *Euphonia* was quite abnormal, and the late Mr. W. A. Forbes first gave a correct description of the anatomical facts. These are briefly, that instead of a muscular ventriculus or gizzard, the Tanagers of this genus possess only a flabby thin-walled sac which runs direct from the proventriculus to the small intestine.

Mr. Alex. Witmore, who has lately been employed on field-work for the Biological Survey of the United States in Porto Rico, suggests that the absence of all traces of the muscular gizzard is due to the fact that the species found in that island, *Euphonia* or *Tanagra sclateri*, feeds exclusively on mistletoe-berrices of the genus *Phoradendron*, elumps of which are common locally in the forest of the island. The seed passes through the body of the bird unchanged, and the glutinous berry surrounding it forms the sole nourishment of the bird and renders unnecessary the presence of a muscular gizzard.

A number of papers of more local interest, such as those on the birds of districts in the State of Alabama by Messrs. Gol-an and Holt, Colorado by Messrs. Rockwell and Witmore, Oklahoma by Mr. W. W. Cooke, and Florida by Mr. R. W. William, add greatly to the value of the volume, while Mr. R. M. Strong writes an "intensive study" of *Larus argentatus* on Lake Michigan. Mr. E. S. Cameron, M.B.O.U., has a readable paper on *Archibuteo ferrugineus* and its nests in Montana, which is illustrated with some fine photographs. Finally we must mention an account by Mr. J. C. Phillips of his journey up the Blue Nile to Sennaar, with which is a coloured illustration of his new Nightjar, *Caprimulgus eleanoræ*. Some doubt is cast on the validity of this new species by Mr. Butler in the present number of 'The Ibis' (p. 181).

The Australian Zoologist.

[The Australian Zoologist. Issued by the Royal Zoological Society of New South Wales. Edited by Allan R. McCulloch, Zoologist, Australian Museum. Vol. i. part 1. Sydney, June 1914. 8vo.]

The Zoological Society of New South Wales, which owns and manages the Zoological Gardens of Sydney, has decided to issue this serial publication "to contain articles of scientific and general interest pertaining to zoology," and the first number has now reached us.

Among other papers there are several of interest to ornithologists. Mr. L. Harrison suggests that a study of the Mallophaga, those curious lice-like parasites which are almost entirely confined to avian hosts, many throw some light on the phylogeny and relationships of the various groups of birds, and gives some interesting instances of the curious facts in regard to the distribution of the same species of parasite on various species of hosts.

A short article by Mr. Basset Hull, illustrated by some photographs, tells us what has been done, and also what more should be done, in regard to Government sanctuaries and reserves for bird-life in New South Wales; and finally Mr. Walter W. Froggatt writes a short note on some of the birds noticed by him on the Saltbush plains of the north-western parts of New South Wales.

Avicultural Magazine.

[Avicultural Magazine. Third series. Vol. v., Nov. 1913 to Oct. 1914.]

The fifth volume of the 'Avicultural Magazine,' under the energetic editorship of Mr. Hubert D. Astley, fully maintains its acknowledged excellence both in the matter and in the illustrations, which latter have always been a prominent feature. In this respect the Society has a great advantage in possessing an editor as facile with his brush as with his blue pencil, as is shown by the two charming plates of *Ægithaliscus erythrocephalus* and *Æthopyga seheriæ*, which adorn the first and third numbers of the present volume. There are several other coloured plates by Mr. Goodchild and a number of interesting photographs by Mr. H. Willford, among which we would draw special attention to those of the Oyster-catcher on pages 45 and 47, the Meadow-Pipit on p. 310, and the Crowned Crane on p. 254.

It is impossible in the space at our disposal to mention all the articles of real merit contained in the volume, but we would draw attention to some of the more interesting. Mr. Collingwood Ingram contributes an account of his father's efforts to introduce and acclimatize the Greater Bird of Paradise into the West Indian island of Little Tobago, which he purchased for this purpose. It is not at present possible to state with certainty whether the birds have yet bred there, but there is every hope of their doing so. Mr. F. E. Blaauw writes an account of how he obtained a pair of the rare South American Parrot *Hemignathus leptorhynchus* in southern Chile, and how with infinite difficulty he transported them across the continent by the Trans-Andean railway to Buenos Ayres, and thence to his aviaries at Gooilust, where they have since bred.

A difficult task was also that of Mr. H. K. Job, the State Ornithologist of Connecticut, U.S.A. He made a journey to the prairies of Manitoba in order to obtain a supply of the young wild ducks of various species. In his article (pp. 64, 99) he describes how he hatched out under hens, and with an incubator, large numbers of eggs, taken when natural incubation had proceeded to a large extent, and how he successfully reared a number of young ducklings which he was afterwards able to safely land in Connecticut.

Mr. Stuart Baker contributes two articles on the habits of the Indian Pigmy Falcon (*Microhierax melanoleucus*) and the Serpent Eagle (*Spilornis cheela*), both of which he kept in semicaptivity in Assam.

There are many other articles dealing with various aspects of aviculture and including some of great practical use to its votaries, and we may conclude by noticing a most useful glossary of the various English names applied to the many species of Parrots, contributed by Dr. E. Hopkinson.

List of other Ornithological Publications received.

- МURРИЧ, R. C. Cruising in the South Atlantic. (Brooklyn Mus. Quarterly, Vol. i. No. 2, July 1914.)
- Austral Avian Record. (Vol. ii. Nos. 5, 6. London, 1914.)
- Avicultural Magazine. (3rd Series, Vol. vi. Nos. 1, 2. London, 1914.)
- Bird Lore. (Vol. xvi. Nos. 5, 6. Harrisburg, 1914.)
- Bird Notes. (New Series, Vol. v. Nos. 9-12, Ashbourne, 1914.)
- British Birds. (Vol. viii. Nos. 5-7. London, 1914.)
- Bulletin de la Société Zoologique de Genève. (Tome ii. Fasc. 1-3, 1914.)
- Californian Fish and Game. (Vol. i. No. 1. San Francisco, 1914.)
- Canada, Geol. Survey. Dept. of Mines. (Museum Bulletin No. 2. Ottawa, 1914.)
- Condor. (Vol. xvi. No. 4. Hollywood, Cal. 1914.)
- Emu. (Vol. xiv. pt. 2. Melbourne, 1914.)
- Irish Naturalist. (Vol. xxiii. Nos. 10-12. Dublin, 1914.)
- Scottish Naturalist. (Nos. 34-36. Edinburgh, 1914.)
- South Australian Ornithologist. (Vol. i. pt. 4. Adelaide, 1914.)

IX.—Letters, Extracts, and Notes.

THE following letters have been received :--

SIR,—In the notice ('Ibis,' July 1914, p. 516) of Dr. J. C. Phillips's paper "Two new African Birds," Proc. Biol. Soc. Washington, xxvi. 1913, pp. 167–8, it is mentioned that "two supposed new forms are described—*Caprimulgus*